Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1-24. (Cancelled).

25. (Currently Amended) A cutting instrument, comprising:

an outer member having an opening at least partially bounded by a sharp cutting edge; and

a helical knife coupled to the outer member for rotation relative to the outer member, the helical knife having a flat surface at a distal end of the helical knife, the helical knife having an edge configured to slice into tough, fibrous tissue, the edge of the helical knife extending through the opening such that, during use, the edge slices into tough, fibrous tissue to draw the tough, fibrous tissue proximally along the helical knife towards the sharp cutting edge, the helical knife edge being arranged relative to the cutting edge such that the edges align in a plane substantially perpendicular to a longitudinal axis of the instrument to create a shearing action therebetween.

26. (Previously Presented) The instrument of claim 25 wherein the edge of the helical knife extends distally through the opening.

27. (Previously Presented) The instrument of claim 25 wherein the sharp cutting edge and the edge of the helical knife are configured to cut tissue therebetween by a shearing action.

28. (Previously Presented) The instrument of claim 25, further comprising:

an inner member received within the outer member, the helical knife being located at a distal portion of the inner member.

29. (Previously Presented) The instrument of claim 28 wherein the inner member defines an aspiration opening, the aspiration opening being located at a proximal portion of the helical knife.

30. (Previously Presented) The instrument of claim 25 wherein the edge of the helical knife comprises a helical edge and the helical knife includes a helical channel.

31. (Previously presented) The instrument of claim 30 wherein the helical channel has a proximal end, a distal end, and a pitch, the pitch of the helical channel increasing from the distal end to the proximal end.

32. (Previously Presented) The instrument of claim 30, further comprising:

an inner member received within the outer member, the helical knife being located at a distal portion of the inner member, wherein a proximal end of the helical channel terminates in an opening through a wall of the inner member.

33. (Previously presented) The instrument of claim 25 wherein the outer member defines a fluid ingress opening through a wall of the outer member in a distal region of the outer member.

34. (Previously Presented) The instrument of claim 25 wherein the sharp cutting edge is located at a distal end of the outer member.

35. (Previously Presented) The instrument of claim 25 wherein the outer member tapers to the sharp cutting edge.

36. (Previously Presented) The instrument of claim 25 wherein the sharp cutting edge comprises a circumferential cutting edge.

37. (Previously Presented) The instrument of claim 36 wherein the sharp cutting edge is circular in shape.

38. (Previously Presented) The instrument of claim 25 wherein the sharp cutting edge is part-circumferential.

39. (Previously Presented) The instrument of claim 38 wherein the sharp cutting edge is circular in shape.

40. (Previously Presented) The instrument of claim 38 wherein the sharp cutting edge is oblong in shape.

41. (Previously Presented) The instrument of claim 25 wherein the outer member includes a shield portion extending distally from the sharp cutting edge.

42. (Currently Amended) A cutting instrument, comprising:

an outer member having an opening at least partially bounded by a cutting edge; and

an inner member received in the outer member for rotation relative to the outer member, the inner member including a shaft having a helical knife defining a sharp, slicing edge, the helical knife having a flat surface at a distal end of the helical knife, the slicing edge having a V-shaped cross section perpendicular to a longitudinal extent of the slicing edge, wherein the cutting edge and the slicing edge are configured to interact to cut tissue.

43. (Previously Presented) The instrument of claim 42, wherein the helical knife is located at a distal portion of the inner member.

44. (Previously Presented) The instrument of claim 42 wherein a clearance between the inner member and the outer member is in the range of about 0.0005 to 0.002 inches.

45. (Previously Presented) The instrument of claim 42 wherein the inner member defines an aspiration opening, the aspiration opening being located at a proximal portion of the helical knife.

46. (Previously Presented) The instrument of claim 42 wherein the helical knife includes a helical channel.

47. (Previously Presented) The instrument of claim 46 wherein the helical channel has a proximal end, a distal end, and a pitch, the pitch of the helical channel increasing from the distal end to the proximal end.

48. (Previously Presented) The instrument of claim 46 wherein a proximal end of the helical channel terminates in an opening through a wall of the inner member.

49. (Previously Presented) The instrument of claim 42, further comprising a hub coupling the inner member to the outer member.

50. (Previously Presented) The instrument of claim 42 wherein the outer member defines a fluid ingress opening through a wall of the outer member in a distal region of the outer member.

51. (Previously Presented) The instrument of claim 42 wherein the cutting edge is located at a distal portion of the outer member.

52. (Previously Presented) The instrument of claim 42 wherein the outer member tapers to the cutting edge.

53. (Previously Presented) The instrument of claim 42 wherein the cutting edge comprises a circumferential cutting edge.

54. (Previously Presented) The instrument of claim 53 wherein the cutting edge is circular in shape.

55. (Previously Presented) The instrument of claim 42 wherein the cutting edge is part-circumferential.

56. (Previously Presented) The instrument of claim 55 wherein the cutting edge is circular in shape.

57. (Previously Presented) The instrument of claim 55 wherein the cutting edge is oblong in shape.

58. (Previously Presented) The instrument of claim 42 wherein the outer member includes a shield portion extending distally from the cutting edge.

59. (Currently Amended) A cutting instrument comprising:

an outer member having an opening at least partially bounded by a sharp cutting edge; and

a helical knife coupled to the outer member for rotation relative to the outer member, the helical knife having a flat surface at a distal end of the helical knife, the helical knife configured to slice into tough, fibrous tissue, to draw the sliced tough, fibrous tissue into the opening, and to shear the sliced tough, fibrous tissue that has been drawn into the opening between the helical knife and the sharp cutting edge, the helical knife being arranged relative to the cutting edge such that portions of the helical knife and the cutting edge align in a plane substantially perpendicular to a longitudinal axis of the instrument to create the shearing therebetween.

60-63. (Cancelled)

64. (Currently Amended) A cutting instrument, comprising:

an outer member having an opening at least partially bounded by a sharp cutting edge;

a helical knife coupled to the outer member for rotation relative to the outer member, the helical knife having an edge configured to slice into tissue, the edge of the helical knife extending through the opening such that, during use, the edge slices into tissue to draw the tissue proximally along the helical knife towards the sharp cutting edge; wherein the sharp cutting edge and the edge of the helical knife are configured to cut tissue therebetween by a shearing action; and

an inner member received within the outer member, the helical knife being located at a distal portion of the inner member, the inner member having a wall defining a hollow interior, [[;]] wherein the inner member defines an aspiration opening ~~therein,~~ through the wall of the inner member to the hollow interior, the aspiration opening being located at a proximal portion of the helical knife.

65. (Previously Presented) A cutting instrument, comprising:

an outer member having an opening at least partially bounded by a sharp cutting edge; and

a helical knife coupled to the outer member for rotation relative to the outer member, the helical knife having an edge configured to slice into tissue, the edge of the helical knife extending through the opening such that, during use, the edge slices into tissue to draw the tissue proximally along the helical knife towards the sharp cutting edge; wherein the edge of the helical knife comprises a helical channel having a proximal end, a distal end, and a pitch, the pitch of the helical channel changing from the distal end to the proximal end.

66-69. (Cancelled)

70. (Previously Presented) The instrument of claim 25, wherein the edge of the helical knife is configured to slice into cartilage.

71. (Previously Presented) The instrument of claim 70, wherein the edge of the helical knife is configured to slice into meniscal cartilage.

72. (Previously Presented) The instrument of claim 25, wherein the edge of the helical knife is configured to slice into fibroid tissue.

73. (Previously Presented) The instrument of claim 72, wherein the edge of the helical knife is configured to slice into intrauterine fibroid.

74. (Previously Presented) The instrument of claim 59, wherein the helical knife is configured to slice into cartilage.

75. (Previously Presented) The instrument of claim 74, wherein the helical knife is configured to slice into meniscal cartilage.

76. (Previously Presented) The instrument of claim 59, wherein the helical knife is configured to slice into fibroid tissue.

77. (Previously Presented) The instrument of claim 76, wherein the helical knife is configured to slice into intrauterine fibroid.

78-81. (Cancelled)

82. (Currently Amended) A cutting instrument, comprising:

an outer member having an opening at least partially bounded by a cutting edge; and

an inner member received in the outer member for rotation relative to the outer member, the inner member including a shaft having a helical knife defining a sharp, slicing edge, the helical knife having a flat surface at a distal end of the helical knife, the slicing edge having a V-shaped cross section perpendicular to a longitudinal extent of the slicing edge, wherein the

slicing edge is configured to draw tissue proximally along the helical knife towards the cutting edge.

83. (New) The instrument of claim 29, wherein the inner member has a wall defining a hollow interior, and the aspiration opening is defined through the wall of the inner member to the hollow interior.

84. (New) The instrument of claim 45, wherein the inner member has a wall defining a hollow interior, and the aspiration opening is defined through the wall of the inner member to the hollow interior.

85. (New) The instrument of claim 59, further comprising:

an inner member received within the outer member, the helical knife being located at a distal portion of the inner member, the inner member having a wall defining a hollow interior; and

an aspiration opening being defined through the wall of the inner member to the hollow interior and being located at a proximal end of the helical knife.

86. (New) The instrument of claim 65, further comprising:

an inner member received within the outer member, the helical knife being located at a distal portion of the inner member, the inner member having a wall defining a hollow interior; and

an aspiration opening being defined through the wall of the inner member to the hollow interior and being located at a proximal end of the helical knife.

87. (New) The instrument of claim 82, wherein the inner member has a wall defining a hollow interior, and an aspiration opening defined through the wall of the inner member to the hollow interior.

88. (New) A cutting instrument comprising:

an outer member having an opening at least partially bounded by a sharp cutting edge; and

a helical knife coupled to the outer member for rotation relative to the outer member, the helical knife having a flat surface at a distal end of the helical knife, the helical knife configured to draw tissue into the opening, and to shear the tissue that has been drawn into the opening between the helical knife and the sharp cutting edge, the helical knife being arranged relative to the cutting edge such that portions of the helical knife and the cutting edge align in a plane substantially perpendicular to a longitudinal axis of the instrument to create the shearing therebetween.

89. (New) The instrument of claim 88, further comprising:

an inner member received within the outer member, the helical knife being located at a distal portion of the inner member, the inner member having a wall defining a hollow interior; and

an aspiration opening being defined through the wall of the inner member to the hollow interior and being located at a proximal end of the helical knife.

90. (New) The instrument of claim 25, wherein the helical knife has a laterally facing cutting edge at the flat surface at the distal end of the helical knife.

91. (New) The instrument of claim 42, wherein the helical knife has a laterally facing cutting edge at the flat surface at the distal end of the helical knife.

92. (New) The instrument of claim 59, wherein the helical knife has a laterally facing cutting edge at the flat surface at the distal end of the helical knife.

93. (New) The instrument of claim 82, wherein the helical knife has a laterally facing cutting edge at the flat surface at the distal end of the helical knife.

94. (New) The instrument of claim 88, wherein the helical knife has a laterally facing cutting edge at the flat surface at the distal end of the helical knife.